



How to Obtain Quarry Permits in Missouri

Several Missouri Department of Natural Resources permits are required to start or operate a quarry in Missouri. This fact sheet gives a summary of the process to obtain the various permits needed from the department.

There are three programs that deal with quarry permits. The Land Reclamation Program, the Air Pollution Control Program and the Water Protection Program.

Surface Mining Permits — Land Reclamation Program

Rock quarry operators that began mining in Missouri on or after Jan. 1, 1972, are required to apply for and obtain a permit from the Land Reclamation Commission. A packet containing application forms, instructions and supplemental information is available from the Land Reclamation Program. Forms are also available by calling the department's toll-free number at 800-361-4827. First-time applicants should talk to the program while preparing their business plan. If assistance is needed with any application form for a mining permit, contact the program directly at 573-751-4041.

To make sure funds will be available for reclamation, the operator is required to post a bond, payable to the state of Missouri, as part of the permit application. The bond remains in effect until the Land Reclamation Program approves the completed reclamation. Upon request of the operator, the reclaimed areas will be inspected by a representative of the Land Reclamation Program. The staff director of the Land Reclamation Program will approve or disapprove the reclamation based on the results of the field inspection.

The operator is required to submit a mine operation and reclamation plan (mine plan) as part of the permit application. The mine plan describes the conditions of the areas to be mined, the methods of mining and the plans for reclamation. This mine plan should incorporate pollution prevention measures.

The mine plan contains very important information about how the quarry will be operated. Quarry owners should prepare and read the plan very carefully and review it regularly. Also, make sure all employees with direct control over the operation of the mine know what is stated in the plan and have a copy available to review at any time.

After the department receives an application it is reviewed for completeness. After it is determined the application is complete, the department informs the company to go out on public notice. At that time, the company will need to run an advertisement announcing an intent to operate a surface mine in a newspaper qualified to run public notices in the county where the proposed mine is located. The newspaper ad will need to run once a week for four consecutive weeks. There is an additional 15-day public notice comment period following the final publication.

The company will also send certified letters to any neighbor whose property borders the proposed mine plan area (if the mine plan area is incised into land wholly owned by the operator then the owner legally does not have to send these letters out), and send certified letters to the local government authority (city or county level). At least one piece of certified mail is sent to the presiding county commissioner announcing a proposed quarry.

Anyone in the public can respond during these six weeks of public comment. By law they can just make comments, they can ask for an informal public meeting, or they can request a formal hearing. Letters with comments only do not stop a permit, but they are all answered to address concerns.

Following the end of the comment period, three things can happen.

1. If there is no opposition the department issues the permit.
2. The public can request the company to hold an informal public meeting to discuss the permit request. The law provides that the operator has a right to refuse such a meeting. If the meeting is held, it is strictly informal, but if it does not result in resolution, there is still the right to request a formal hearing. Following the meeting, a staff director recommendation is prepared to approve or deny the permit.
3. If the public requests a public meeting but the company decides not to hold one, a staff director recommendation is prepared to approve or deny the permit. The public can request a public hearing before Land Reclamation Commission. Following the public hearing, the commission decides whether or not to approve the permit.

Air Permits at Quarries and Stone Crushing Facilities — Air Pollution Control Program

A facility is required to have an air construction permit prior to construction and operation of the equipment. A facility may apply for a pre-construction waiver which, upon approval, allows construction, but not operation of the facility. General land clearing of the site is acceptable prior to receipt of the air permit but this activity may require a land disturbance permit from the Water Pollution Control Program.

The pollutant of most concern for quarries is particulate matter with diameter of less than 10 microns, or PM10. If a quarry has a generator on-site, nitrogen oxides may also need to be taken into account in the permit.

To receive an air permit, a facility must first submit a permit application and associated forms with a filing fee to the Missouri Department of Natural Resources. The application forms include an Application for Authority to Construct, Emissions Unit Information forms, a site layout form and worksheets for haul roads, storage piles and fuel storage tanks. Information needed with these forms includes a drawing of the site layout, a listing of process equipment that will be used with its manufacturer, date manufactured and serial number and the rated design performance of the equipment. Facilities will also need to report the expected annual rock production at the site.

The department's Air Pollution Control Program calculates the emissions of each "piece" of equipment to verify the proposed plant will be in compliance with all air quality standards. Air Program staff also take into consideration haul roads used by vehicles in the quarry and potential dust that may come from these roads.

After review of the completed application, the department will draft a permit for the facility to review. The facility then has an opportunity to comment on the draft permit. If both sides are in agreement with the permit and the conditions of the permit, the department will issue the permit after the permit review fees are paid.

The potential emissions from a facility help determine what permit conditions are necessary for the facility to maintain compliance with air quality standards and what type of permit the facility needs. There are 3 types of air construction permits: De Minimis, Minor and Prevention of Significant Deterioration. The only type of air permit that triggers a public notice is a Prevention of Significant Deterioration permit, also referred to as major air permits. This type of permit is required when the potential air emissions of any pollutant is above 250 tons per year. Most Missouri quarry permits have potential emissions of particulate matter less than 10 microns well below 250 tons.

In addition to a construction permit, an operating permit may also be required. Operating permits are required if a facility has large potential emissions or if any equipment is subject to the New Source Performance Standards, or NSPS. Plants with portable permits are not required to have an operating permit. If an operating permit is required, an application must be submitted after the facility begins operation.

An Emissions Inventory Questionnaire, or EIQ, is required for a facility that holds a construction or operating permit. A full EIQ is required for the first year of air emissions. Depending on the type of permit, a full EIQ is then required either annually or if emission levels change more than 5 tons per year.

If you need help determining whether your operation needs a permit, or if you need help completing an application, contact the department at 800-361-4827.

It is important to note you may need a permit if you plan to make changes at your existing quarry and stone operation.

To apply for an air permit, you will need to send a completed application to the air pollution control agency with jurisdiction in your area.

City of St. Louis

Division of Air Pollution Control
314-613-7300

St. Louis County

St. Louis County Dept. of Health
314-615-8983

Kansas City

Kansas City Health Department
Air Quality Section
816-513-6314

Elsewhere in Missouri

Missouri Dept. of Natural Resources
Air Pollution Control Program
573-751-4817

Air permit forms are available by contacting your local air pollution control agency, or online at www.dnr.mo.gov/forms/index.html#AirPollution.

Stormwater and Process Wastewater Permits — Water Pollution Control Program

General permit MO-G49 is available for rock quarry stormwater and process wastewater discharges.

Upon submittal, the department will review the application and hold a 30-day public comment period. After the public comment period, the department will either approve or deny the application.

Process wastewater includes quarry pit or mine dewatering, and vehicle and equipment washwater (without added detergents, acids, caustics, solvents or other additives). It authorizes the use of soap or detergents in vehicle washing, but only if less than 500 gallons per day is used, and the water is not discharged (i.e. allowed to soak into the ground). Equipment washwater without these additives can be discharged the same as other process wastewater. Further explanation is provided in the general permit.

This general permit has discharge monitoring and reporting requirements. Sand and gravel washing, clay pits and clay mining are not covered under this permit. These operations require different permits. To apply for the general permit MO-G49, complete an application Form E, available on the department's website at www.dnr.mo.gov/forms/780-0795.pdf, and submit it along with a location map and required fee to your nearest department regional office.

Facility owners may obtain a site-specific permit instead of a general permit, if they so desire. Site specific permits may be applied for by submitting Form A and Form C to the appropriate regional office. A site-specific permit takes into account the individual characteristics of the site; stormwater runoff, process wastewater and domestic wastewater discharges. This means while multiple general permits might be required for several different activities, one site-specific permit can be obtained that authorizes them all. It can be less conservative in effluent limits or narrative conditions if the conditions of the receiving stream allow, but the annual fees are considerably higher. The department may require a quarry to obtain a site-specific discharge permit if it determines it is needed to better protect water quality.

404 Permits and 401 Certifications

Section 404(a) of the Clean Water Act, requires a Federal 404 Permit from the U.S. Army Corps of Engineers for construction activities where there is a discharge of dredged or fill material into waters of the United States. Missouri requires a 401 Certification for any project that needs a Federal 404 permit.

"Waters of the United States" are:

- Lakes.
- Rivers.
- Streams (including dry streams).
- Abandoned quarry pits.
- Wetlands (including dry wetlands).

The following are not generally considered “waters of the United States”:

- Non-tidal drainage and irrigation ditches.
- Artificially irrigated areas.
- Artificial lakes or ponds.
- Artificial reflecting or swimming pools.
- Water-filled depressions.

Missouri is split into different U.S. Army Corps of Engineers Districts. Use the map located at www.dnr.mo.gov/env/wpp/401/corps-map3.gif to find out which district covers your area.

Contact the corps to determine if a project will require a 404 permit. Applicants submit a copy of the 404 permit application to both the corps and the Department of Natural Resources’ Water Protection Program. After the application is received, the corps and the department will hold a joint 30-day public comment period. After the comment period, the corps will request issuance of the certification. The department will then issue, issue with special conditions, or deny the certification.

For more information

Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
800-361-4827 or 573-751-4817
www.dnr.mo.gov/env/apcp/index.html

Missouri Department of Natural Resources
Land Reclamation Program
P.O. Box 176
Jefferson City, MO 65102-0176
800-361-4827 or 573-751-4041
www.dnr.mo.gov/env/apcp/index.html

Missouri Department of Natural Resources
Water Protection Program
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800-361-4827 or 573-751-1300
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